

MICHIGAN FARMER.

Devoted to Agriculture, Horticulture, and Domestic and Rural Affairs.

NEW Perfect Agriculture is the foundation of all Trade and Industry.—Liebig. SERIES.

VOL. V.

DETROIT, AUGUST, 23, 1847.

No. 6.

Buffalo Wool Depot.

[We give below from the Ohio Cultivator a letter of T. C. Peters, the manager of the newly established Buffalo Wool Depot, communicating an account of the success which has attended the enterprise. It will be observed that the orders which came in from Eastern manufacturers far outran the supply, while the rates obtained were much above those received by the farmer elsewhere. It may not be amiss to give some account of the way in which business is managed at these establishments.]

A suitable building being provided, wool is received by the manager for sale from all who choose to confide it to his care. It passes through the hands of an experienced stapler, who divides it into different grades according to quality,—designating each sort by numbers, and keeping a correct record of the whole. Those who prefer it, can have their clip kept separate. A liberal advance, (amounting at the Kinderhook depot to two-thirds the estimated value) is allowed the owner at the time the wool is deposited, and he controls the time and rate of sale. Every expense, (except a charge for insurance, of one quarter of one cent a pound every three months,) is embraced in a commission of so much a pound paid to the establishment after sale is effected.—At the Kinderhook depot, the commission charged at its first establishment was one and a half cents a pound; since the first year, the rate has been one cent. We are not informed as to the rates at Buffalo. When desired, sacks are furnished by the establishment at a charge of twelve and a half cents each for their use, and when sacks are brought by the farmer, fifty cents is allowed for them unless requested to be returned.

Such is an outline of the plan, of the advantages of which to the woolgrower the letter of Mr. Peters affords additional proof, and we would advise our readers who have any considerable number of sheep, especially if of the finer grades, to avail themselves of one of the Eastern depots

for the sale of their next year's clip, unless a depot should meanwhile be established here. We do not see why Detroit is not as favorable a point for the location of such an establishment as Buffalo. The interval between the woolgrower and the manufacturer is greater, and the price of wool, under the present state of things, is at a less proportionate rate in comparison with its real value. For the benefit of an interest which is rapidly increasing in importance, we hope to see a wool depot established here, and we fully believe, if rightly got up, the enterprise would be liberally remunerating to its originator.]

BUFFALO WOOL DEPOT—LETTER FROM MR. PETERS.

Buffalo Wool Depot, July 3, 1847.

MY DEAR SIR.—The cheering letters which I receive from all parts of the West, afford me a real pleasure. This establishment meets with universal favor so far, and I only hope it may not disappoint my many friends. Every day convinces more and more of the great benefit it confers upon farmers. I am selling the wool as fast as it comes in and is sorted, at prices ranging from 23 to 55 cents, and there has hardly been a lot sold by farmers to speculators, upon which I could not have advanced to the farmer as much money as he sold for, and then left him a handsome margin. I have large orders from the Eastern manufacturers for wool at good prices. I have one order for a lot of fine wool which I fear I cannot fill from any wool west of here, and may be compelled to send east for it. It is for a grade of wool that is worth fifty-five cents.

I have no fear as to the complete success of the plan, it commends itself so rapidly to the wool growers, and is withal so very useful to all classes, that it must succeed. Many men thought Buffalo too much out of the way. If they were to see the amount of orders lying before me, they would very quickly acknowledge their mistake. Notwithstanding the sales daily made, the orders now exceed half a million of pounds—embracing every variety of wool.

If the farmers had generally sacked their wool and sent it early, the whole would have been sold before this time at good prices. If they had wanted money I would have advanced from 15 to 25 cents per pound without any extra charge save the interest.

Another very excellent good grows out of the Depots, men who have choice sheep and wool, by storing their wool here, gain a knowledge of their flocks that they could not get published any other way. For I am in the great stream of emigration, and farmers visit the Depot from all over the Western States.

My most sincere thanks are due to all who have kindly lent me a helping hand, and I hope I shall not prove ungrateful.

Sincerely Yours, &c.

T. C. PETERS.

Aphis, or Plant Louse.

In No. 5 of the Farmer, I noticed an article from the Jamaica L. I. Farmer, headed "Cure for plant lice." Allow me to say, I think this cure just no cure at all; and it may be laid away with the bottles of sweetened water, and the white tubs of water with candles in them, which were recommended for the destruction of the Curculio. The sweetened water, I tried among a host of Curculios, and out of about three quarts of insects which I caught, I could not find one Curculio.—Doubtless I derived some benefit from the destruction of so many insects, but was disappointed in not catching the Curculio; as I think others will be if they bore their trees and put sulphur in them, expecting to rid the trees of Aphides.—This same experiment has been tried and exploded time and again. Were it not for making this article too long and tedious, I would give you the result of some experiments made with sulphur some years since; all of which resulted in failure.

While upon this subject I will speak a little more at length concerning this curious little insect, the Aphis. There is scarcely a tree or shrub which is not attacked by one or more species peculiar to itself. Some have wings, and some have no wings—some are black, green, brown, in short, almost every color. They attach themselves to the branches, leaves and roots, and feed upon the juices of the plant until they sometimes make it an unsightly object.

They are both oviparous and viviparous, thus having the advantage over other insects in producing their young. Probably many besides myself have often been surprised at their wonderful fecundity. Did you, Mr. Editor, ever watch the movements of the insect friends and foes of the Aphis? If not, I think you would be well paid for your time, should you take the trouble to notice their friends, the ants, as they run about among their drove of Aphides, or "milch cows," and milk them; and if they see an enemy approaching, strive to protect them from its attack. I have often watched the ants as they run their antennae over the Aphides, apparently coaxing them to give out the sweet substance that is ejected from two small horns situated on their backs, and upon which the ants feed.

We are sometimes asked, what will destroy

the ants upon the trees. We answer, as you see the ants ascend the tree, just follow them with the eye and see for what purpose they are there. If it is to feed upon the milk of the Aphides, you will find them running to the ends of the new and tender branches, on the under side of the leaves, where the Aphides feed. You will see that in this case it is the Aphides, and not the ants that injure the trees, destroy the Aphides, as directed in the last number of the Farmer, and the ants will leave the tree. There are some plants and trees, upon the juices of which the ants love to feed. Where this is the case, wash the plant or tree with whale oil soap, and throw some of it about the roots: all the ants that are not killed will leave, and not be found there again for a long time. Now for the enemies of the Aphides. They have many enemies, one of which we will describe, it being one which is often seen upon trees and shrubs, and as curious an insect as the Aphis. It is the Hemerobius, and sometimes called the lion of the Aphides.—When in the larva state, it is about $\frac{3}{4}$ of an inch long, of a reddish brown color, having six legs and a very strong pair of forceps, with which it seizes its prey. A few years since, I caught about a dozen of these insects, and placed them in a box with a few stems and leaves from an apple tree, that were covered with Aphides. I was surprised to see how quickly they would seize upon the Aphides, and suck them dry, leaving nothing but the skins. In one or two days, I missed some of my lions, but could not imagine what had become of them, until, upon examination, I found that for the want of Aphides, they had fallen upon and devoured each other, so that I had but few left; these I fed until they rolled themselves up into small white cocoons, not larger than a small pea. When they emerged from these, they came out beautiful, lace winged flies. The manner in which these flies deposit their eggs, is quite a curiosity. They place themselves upon the underside of leaves and in the vicinity of Aphides, and commence by depositing a viscid substance upon the leaf and throwing its body up to its full length, makes a hair about $\frac{1}{2}$ an inch long: upon the top of this, they deposit an egg. They continue this, until they have made quite a forest in miniature, upon the leaf. As the young come forth from the eggs, they immediately commence the work of destruction among the Aphides.

J. C. H.

Detroit, 10th Aug. 1847.

From the Genesee Farmer.

Hop Culture.—Drying, &c.

MR. EDITOR:—In describing the method of drying hops, so as to be understood by one wholly unacquainted with the business, I will first give a description of the kiln, which has been, heretofore, the kind used—at any rate, the kind we used a number of years, with good success.

It is built by digging into a side-hill to the perpendicular depth of about seven feet below a line level with the upper side—digging the space for the bottom seven feet square, and for the top about fourteen feet; laying a tier of stone, a foot thick on the four sides, with a space for a door through the wall on the lower side. Sills are then placed on the wall, into which are fitted joists three feet apart, on which the floor is laid, consisting of slats $1\frac{1}{2}$ inches square placed about 1 inch apart, over which is drawn a coarse linen cloth fastened to the sills on the sides. Another tier of sills is then put on, to which is fastened the roof; then the gable ends are boarded up, leaving a door in one end, and a window in each end to let off the steam. Now, after burning 5 bushels of charcoal underneath to heat the kiln, it will be ready to receive the hops, which are conveyed to the kiln in sacks, (made of 4 to 5 yards of cloth each,) and poured on to the cloth to the depth of 8 or 9 inches, spreading them evenly with a rake, taking care to move your feet close to the cloth, so as not to tread on the hops. After the hops are on and windows left open above, it will require much judgment and practice to know how much coal to use, and how often to put it on; which must be regulated by practice, as too much heat will spoil the hops; and again if the heat is not regularly kept up, after the steam has started, it will settle back on to the hops and spoil them. Yet the quantity of coal to be used, for the kiln I have described, will vary but little from three pecks at a time, put on once an hour.

Roll brimstone, or sulphur, is often used in drying hops. We prefer sulphur, and use it in the following manner: as soon as the hops are put on, close the windows above; put on some coal below, and when it becomes coals of fire, put on 5 or 6 large table spoonfuls of sulphur, that the steam of it may all take effect on the hops at once, thereby opening the pores making them look better when dried. In 5 or 10 minutes after the sulphur is put on, the windows must be thrown open, and remain so till the steam all passes off; when they may be closed again, and in a short time the hops may be stirred up—those from the outer sides brought into the middle—those moved to the sides and all leveled as before. To determine when they are dry enough to take off, will require some experience; yet by examining the stem of the hop and finding it tough with no juice in it, may be considered a good test. The hops, when dry, are taken into sacks by means of a spout on the lower side of the kiln, and carried to the hop house chamber, underneath which is the press, consisting of two upright posts, with a beam across near the top, and two sills at the bottom, to support the posts and prevent them raising. There is also a screw passing through the centre of the beam, under which is fitted a box made of plank so as to be taken to pieces. The inner side of the box is

$4\frac{1}{2}$ feet long, $1\frac{1}{2}$ feet wide, and 4 to 5 feet high. When the box is fitted for pressing, a cloth is placed under it, and two men tread in hops till it is full, when another cloth is put on the top.—The follower is then put on, and the screw turned down as far as desired, when the box is taken to pieces—the cloth brought together on the sides and sewed—the screw turned back—the bale of hops taken up—another piece of cloth sewed on each end, and then it is ready for market.

In the above statement I have taken only a practical view of the subject; but in building a kiln, the approved method would be to build it of wood, above the ground, being some ten feet below the cloth—the sides perpendicular, and three feet above the cloth to the eaves—the inner side of the walls lathed and plastered from the ground to the eaves. Some burn wood in such kilns by making use of stoves.

After all is said and done, hop raising is not generally considered safe business, unless the price exceeds 10 cents *per pound*.

Yours, &c.

LINCOLN CUMMINGS.

From the N. Y. Farmer and Mechanic.
N. Y. Farmers' Club.

[The following extract from the proceedings of this active club, will serve to show the interesting character of their meetings, and how much useful & entertaining information is there thrown into common stock.]

July 20th, 1847.

The reading of the circular of the managers of the twentieth Annual Fair of the American Institute, was called for by the Chairman. It was read. This circular appeals to the zealous friends of American Industry throughout the U. States on the approaching opportunity in October next, to fill the spacious amphitheatre of Castle Garden, with the choicest specimens of the genius and work of our citizens in every branch of art and industry. It reminds them of the importance of this great annual display, and adds to the natural and noble love of country, the offer of premiums, exceeding in amount all former offerings. It presents the inducement to all of this assemblage of valuable articles for examination—and reminds the farmers also that during the Fair, there will be a Convention of Farmers, Gardeners and Silk Growers, and of those who understand the value of the choice breeding of sheep for high qualities of wool—to be present—that all may come and give what knowledge they have, and take away all which suits their taste or business. And as to this great staple, wool,—samples are to be brought together from Europe and America, together with all the information relative to their production—which can be made available in the mountains and valleys of our vast continent, for the culture of the richest fleeces to

clothe the millions of our people. The fair opens to the public at Castle Garden, on the 5th of October next—and all the articles which the owners intend to place there for competition for premiums, must be at the Garden on the first or second days of October—in order that the managers may have full opportunity to give to such articles their proper places in the exhibition.

FUNDI OR FUNDUNGI.

The Jamaica Society has received from Mr. Cathcart, of Sierra Leone, some seeds.

The following account is from Dr. Clark, assistant Surgeon at Sierra Leone, of what is called by the natives, "*Hungry Rice*." It is a semi-transparent cordiform grain, about the size of mignonette seed—sown in May or June—ripe in September—attains eighteen inches height—its stems, which are very slender, are bent to the ground by the weight of its grain.

Experienced cultivators say that this Lilliputian grain delights in light soil, and that manure is unnecessary. It is valued by delicate and convalescent persons. Botanical title—*Paspalum exile*.

Mr. Wakeman presented the following statistics relative to wool.

SHEEP AND WOOL.

	Number of Sheep.	Pounds of wool.	Pounds to each Sheep.
To England and Wales,	20,506,000	112,500,000	over 4.25
Scotland,	3,500,000		
France,	39,000,000	93,000,000	2.4
U. S. { free states,	12,144,408	27,488,407	2.25
slave states,	7,166,906	8,313,508	1.16

Mr. Wakeman.—We are pleased to see here, Mr. Gregg, recently from Mexico, and we shall be happy to hear his remarks upon the agriculture of that region.

Mr. Gregg.—I am just arrived from Mexico. I had no expectation of being called on for a speech. I have been from an early age among the Indians. I will answer any question as well as I can. A conversation then arose, and Mr. Gregg stated his answers in his substantial and pleasing way. He said that his acquaintance was with Northern Mexico, Saltillo, Monterey, Chihuahua, and where sheep are raised to a large amount, from whence the city of Mexico obtains mutton. I understood and believe that five hundred thousand of these sheep are annually driven from Northern Mexico, south. This breed is excellent for its mutton. I never tasted better, and very little as good. The sheep are quite small, not more than half the size of the common sheep of the United States. Their fleeces are hardly finer than goat's hair, and are only used for coarse purposes. The wool hair is from four to six inches long—some say it is a hybrid of sheep and goat. The animals are furnished in many cases with *two pairs of horns*, sometimes a few of them are found with *three pairs*. These sheep are generally valued at about one dollar each, and their mutton sells for three or four cents a pound.

In Northern Mexico there is no tillable upland. None but vallies and river bottoms, lands which lie so that they can be irrigated, are used for cultivation. Hogs are not used to any considerable extent—they are chiefly used for their lard. The meat of goats is very commonly used by the lower classes—and mutton by the higher classes.

Their cattle are rather smaller than those of our western country, and are remarkable for their long horns. I have seen many of them three feet in length. Indian corn is raised every where—cotton, wheat and sugar also are raised in considerable quantities. I saw some of the largest sugar cane growing near Monterey. I found stalks well jointed for eight feet in length, and they were about six inches in circumference. The sugar cane of Cuba is larger, but it grows seldom more than two or three years from the root, while the Mexican cane grows four or five years in succession from the root. The agricultural implements of the country are very badly contrived. Their plough is made of a couple of sticks of wood, seldom pointed with iron, drawn by oxen pulling by their horns. Common laborers are the same poorly paid—generally run in debt to the landlord, and not allowed to leave him in debt—which they are usually unable to pay. The pasture on the uplands is very fine, for where the grasses are dried up by the season they constitute *fine feed as hay*. The farms are fenced by chapparal—a term signifying a thick-*et*. They make no butter, but a good deal of poor cheese. I never saw a Mexican have a churn. Some of our Yankees at Saltillo, who were connected with a cotton factory there, make and sell butter to good account. The markets at Saltillo are well supplied, but the great body of the people live poorly. They chiefly subsist on cakes made of Indian corn—and on beans. They use lime in boiling water to hull their corn, and then grind the grain to a paste, between two stones—something as a painter grinds paint. They make it into small round cakes, called *Tortillas*, and bake them on a piece of sheet iron if they have it, or on a stone. Great crops of Indian corn are raised in the vallies of Monterey, Chihuahua and Mondova. Fine wheat is also raised all the way from Saltillo to Chihuahua. They get thirty and forty, and sometimes fifty bushels to the acre.—They say that they sometimes *get an hundred fold!*

Mr. Wakeman now leaves the chair, and his place is supplied by Mr. Dutcher.

Mr. Gregg.—At Mier, some two years ago, it is said that an iron plough was introduced, but that it was brought before the Inquisition and sentenced to have its wood work burned and its iron thrown into the river.

Mr. Wakeman stated that the officers of the Long Island railroad had politely offered the gratuitous use of their road to the Farmers' Club for an exploring visit on Long Island, for Thursday

at 9 o'clock A. M. On motion of Mr. Wakeman, the thanks of the Club were unanimously voted to the officers of the railroad, and the invitation accepted.

Mr. Gregg.—A common fleece in Northern Mexico is deemed to be one pound weight. I have made some botanical collections in Mexico, which I will send to the Farmers' Club.

Mr. Steel, of Hempstead, in Eastern Canada, requests assistance in procuring the best practical essays on the subject of farming for an Agricultural Association recently formed in his county of Stanstead. He states that shallow plowing has long been generally practised, and that there is need of great general improvement in cultivation.

Mr. Wakeman.—Let us continue the subjects of wool growing and turnip culture, at the next meeting of the Club. Adopted.

The Club then adjourned.

H. MEIGS, Sec'y.

From the Farmers' Cabinet.

Cause and Proventives of the Rust in Wheat.

MR. EDITOR,—The rust in wheat is the presence of fungi, which may be seen by the aid of a good microscope. The cause of these fungi, is the presence of free carbonic acid, and ammonia in the wheat plant, in greater quantity than can be assimilated by it. About the latter part of June, and from that time onward till November, carbonic acid and ammonia are generated very fast, by the decay of animal and vegetable matter. Water possesses the power of absorbing immense quantities of these gases. I have not any work by me at present—being away from home—to see the exact amount, but I think it is stated that one single gallon of water will condense and absorb upwards of eight hundred gallons of ammonia. In the summer, after a drouth of some considerable length, the rain of a small shower, or the rain of the first part of a heavy shower is highly charged with these gases—and the heavy dews, too, are often very highly charged with them. The water of a slight shower, or of a heavy dew, after a short drought, coming in contact with the stalks of wheat, is absorbed by them, and the carbonic acid and ammonia become mixed the juices of the plant. These gases, coming as they do, in greater quantity than can be assimilated by the plant, and the surplus, if great, so weakening the energies of the plant as to deprive it of the power of expelling them, remain in the pores or other wide cells and vessels. Now, if the seeds of the kinds of fungi that infest wheat are present, the extra carbonic acid and ammonia furnish their proper food, and they immediately germinate and soon grow to full maturity, bursting and splitting the stalk of the sickly wheat in order to get room for their development—thus disorganizing the tissue of the wheat stalk, stopping its pores, preventing the operations that should go forward in it, thereby killing the plant.

Now for the remedy. To prevent this carbonic acid and ammonia from injuring the plant, it is necessary that the carbonic acid should be neutralized, and the ammonia prevented from getting in contact with the wheat stalk in such great quantities—and, also, the stalk should be strengthened as much as possible against such attacks.—There are many substances that may be made use of to attain these desirable objects. I will mention a few, and the method of applying them.—Pulverize charcoal of any kind until it is reduced to the size of marbles and less, then take stone lime and reduce it to powder by slacking it with water; mix equal portions of it and ground charcoal intimately together, and apply the mixture immediately at the rate of ten bushels to the acre. It would be well to put more than the usual quantity on those places where the wheat looks very luxuriant, and less than the usual quantity where the wheat is poor and slender. Or, take four bushels of good hickory ashes, or five bushels of good oak ashes, or more than five bushels of weaker ashes, to five bushels of ground charcoal to the acre. The ashes and lime will not only benefit the wheat crop, even if it is not exposed to the rust, but also the succeeding crop—while the charcoal will do good as long as the ground is cultivated and it remains there, as it never decays, and is always useful. It is the most valuable fertilizer that we have, and is worth more than its weight in gold. I could give you many instances of its wonderful—nay, astonishing—powers, but my limits here will not allow me.—One bushel of salt of any kind—say salt from the beef, pork, or fish barrels, or the rock salt used by graziers—reduced to powder, and added to five bushels of ground charcoal and mixed intimately, applied to an acre, will be as efficacious, if not washed away by heavy rains, as the other preparations.

The soda of the salt, the potash of the ashes, and the lime unite with the carbonic acid, and render it unfit for the use of the fungi, and strengthen the wheat plant so as to enable it to assimilate the carbonic acid and ammonia—while the charcoal absorbs both the carbonic acid and ammonia, and prevents the wheat from becoming surfeited with them. It holds these gases subject to the action of the wheat, and if the wheat at any future time finds itself in want of carbonic acid and ammonia—if its roots be in contact with the charcoal, they will draw that held by it. Thus the charcoal performs two very important services, and hence its great usefulness.

Lime that has been air slacked, will not answer in place of that which is fresh slacked, as it has already become partially, if not wholly neutralized, by having already absorbed carbonic acid, and therefore cannot neutralize the carbonic acid which is injuring the wheat.

The proper time to apply the before mentioned preparations, is just about the time the wheat is in full blossom, as that is the time at which the

surplus of carbonic acid begins to work the injury. The mode of application is to put them in a bag, and walking up and down the furrows, sow them as you do grain.

If the season is such that much carbonic acid and ammonia is formed just at the time the wheat is most liable to be injured, it may be necessary to repeat the application at an interval of, say two weeks or less. And a very bad season may require the applications to be repeated several times. These operations, however, will not only save the grain from rust, but will make fine, large, full heads of plump wheat, and will also be useful to the succeeding crops—particularly the charcoal. Care must be taken not to sow the preparations too thick in one place, for they may kill the plants. A top-dressing of ground charcoal at the time of sowing the wheat, harrowed in with the wheat, and rolled over with a heavy roller, will be found highly efficacious in preventing the rust. It should be put on at the rate of twenty-five bushels to the acre.

The preparations I have recommended are very efficacious in preventing the smut in wheat.

CHEMICO.

Economy of Labor-saving Utensils in a Kitchen or on a Farm.

A little reflection will show that to save time is a great gain, while a liberal, though economical expenditure of money is equally so. Labor-saving machines in a farm kitchen are, therefore, of the utmost importance, as they not only save time, but strength; for instance, if a farmer expends a few dollars in the purchase of a churn so constructed that it will bring butter in five, or ten, or twenty minutes, and afterwards work the butter fit for printing, and this only by turning the handle (and there are such churns now in use,) he will soon perceive that he has gained more than at first sight he could think possible. If he adds to this, pans for hot water, in which the milk pans can be placed to prevent the new milk from cooling too rapidly, he will find on churning day, that he has gained one-fifth more butter than by the ordinary method. If such liberal conveniences are allowed the farmer's wife and daughters, as the modern sausage-chopper, that noiseless friend to the farmer's wife, that will silently do in two hours what it would take a man a whole day to accomplish by his single arm, or if a wood-shed in which the kitchen shall open, where a space can be portioned off for barrels and boxes that are to be receptacles for all sorts of things that the women should have in use close to the scene of their labors, and to receive trash that otherwise would be thrown out, littering the yard, and giving an air of unthrift that is always disgusting, and if saved in barrels and carefully collected on a compost heap, will serve as a manure for the garden or farm, of the best quality, the farmer himself will find in a short time, that in saving his strength, time, and health, he has

gained at the end of the year, at least, the price of the labor-saving machines, and the following year, there will be a clear profit of money as well as time, that can be spent more profitably in lighter and equally useful occupations. If in the above mentioned wood-house, a row of barrels be placed close to the kitchen door, one for ready made soap, one for soap-fat into which is previously placed twenty-six pounds of potash, and two barrels of water, one for pig-slop, another for bones and all the worthless scraps and sweepings of the house, and another for chicken-feed, the following results will take place:—The soap being close at hand, can be used, when it is wanted, and there will be no excuse for things not being kept perfectly clean. If the barrel of potash and water be kept close at hand, ten times as much soap-fat will be gathered and saved, as if the barrel were not there; for it will take no more time to throw it there than into the pig's barrel, or to the dog. The potash will prevent the fat from becoming mouldy, or filled with skippers, which it is apt to do when collected in the usual way. The soap will make itself, if stirred once or twice a week. Potash, instead of ley, is most economical, as it is more certain in its results; and the ashes are more valuable on the land than what the soap is worth. The pig-slop will be under the mistress's eye, and ingredients neither too good nor too bad will be put in. The bones and scraps, now so highly prized as manure, may all be saved; and last, not least, dirt is not made, and the time and strength that would otherwise be taken in cleaning and scouring are saved for better purposes; and the chickens may be regularly fed without waste of time.

On a farm, as in a bee-hive, all should be workers, and the drones sent off. The women as well as the men, should work; but all will find that the best economy is to save, whether it be in time or money, or strength, though all should be diligently, carefully, and liberally used, if the farmer wishes to thrive. If from a careful management of time, you save one hour a day, either from unnecessary sleep, pleasure, or ignorance, you will gain in five years, seventy days and two hours for profitable improvement of mind or means.—*Amer. Agriculturist.*

Canada Thistle.

Some persons suppose that this plant is only propagated by root, not from seed. The idea is unquestionably erroneous, and leads to a carelessness which permits the increase of the pest. It is true that it spreads rapidly by roots; but where it is seen to spring up, as it frequently does, at a considerable distance from where it had previously grown, it may be known to have sprung from seed. It should therefore be made a rule to prevent its seeding in all cases. We believe a law requiring the periodical cutting of Canada thistles on the public highways in this

state, has for some time existed, and during the last session of the Legislature, an act was passed to "provide for the destruction of Canada thistles, and other noxious weeds on the banks of the canals, railroads, and turnpike roads." This act makes it the duty of the superintendents of canals, and the several railroad and turnpike corporations, to cause all the thistles and noxious plants growing on the sides of the canals, to the width owned by the state, and all those growing on lands belonging to the corporations, to be cut twice in each year—once between the fifteenth day of June, and the first day of July, and once between the fifteenth day of August, and the first day of September. In case of the neglect of the officers to have this work performed as specified, it is provided that any person may cut the thistles, &c., within the time mentioned, and they shall be entitled to receive for the labor performed, at the rate of one dollar per day, of the superintendents of the canals, or the several railroad companies.

In pastures and all grass grounds, thistles should be mowed close to the ground twice a year, just as they are in blossom, before any of them have seeded. The labor of cutting will in many cases be repaid by the extra quantity of feed which may be thus obtained. Thistles frequently occupy the best ground, and where they stand thickly, they prevent animals from eating the grass, which grows among them. By cutting them closely, the grass springs fresh and sweet, and the patches are grazed so much that the growth of the thistles is often much checked. On moist land, which is inclined to make a thick sward, thistles may be effectually smothered down and killed by following up the practice of cutting for a few years. We have formerly proved this in our own experience in repeated instances.

In cultivated land, the Canada thistle may be destroyed by frequent plowing. Four thorough plowings, with an interval of three weeks, between each plowing, will destroy the principal portion of them. In a late excursion to the western part of the state, we were informed by several farmers that they had pursued this course with advantage. Among others we may name David Thomas, Aurora; G. V. Sackett, Seneca Falls; John Johnson, near Geneva; and D. M. Ellis, Onondaga Hill. Mr. Ellis showed us a field which a few years ago was completely overrun with Canada thistles. He plowed it in June, after the thistles had got considerably started, and as soon as the sod was pretty well rotted and the thistles had shot through the furrows for a second growth, he plowed it a second time, and so a third time, frequently harrowing in the interim between the plowings. This field was sowed to wheat, and scarcely a thistle appeared in the crop. It is now in pasture, and but very few thistles have yet shown themselves.

A new Cherry.—"I. L." informs us that a new Cherry has been discovered at Mazel, in

France, excelling all others for size, beauty and flavor. It is a Bigarreau, and an enormous bearer. A committee of the Auvergne Horticultural Society have examined the tree and its fruit. They found some of the cherries weighing ten grammes (6½ dwts.) each, an average of 11 weighed one fifth of a pound; an enormous weight compared to other cherries. The fruit is oval, skin fine vermilion, and carmine glossy flesh rose colored, firm, though melting, very sweet, stone small. The tree is a vigorous grower, with giant foliage, leaves measure seven inches long and four wide.

The above notice of a most remarkable cherry is recommended to the enterprising members of our Horticultural Society, who will no doubt avail themselves of the first opportunity to possess so valuable a fruit as it appears to be.—*Cincinnati Gazette*.

Successful Steep for Seeds.

Much has been said and written on the subject of soaking seeds in different preparations, for the purpose of promoting their rapid vegetation and growth. As far as I have heard or read, these experiments have proved that most of these solutions or preparations are nearly or quite worthless. I will, however, state a few facts in regard to one solution that I have tried for the last three seasons.

In the winter of 1845 I found, in the Philadelphia Saturday Courier I think, the following recipe:—"Soak garden seeds four hours in a solution of chloride of lime in the proportion of 4oz. chloride of lime, to one gallon of water."—The writer observes that seeds which were soaked thus, came up some days sooner than those which were not soaked, and that the plants kept the lead through the season.

The experiment being easily tried, I made up my mind to give it a fair trial, and see what the result would be. On the 10th of May, 1845, having my ground ready, beds made, hills all prepared, so that as little time as possible should be consumed in planting, I put cucumber, muskmelon, beet, summer savory and radish seeds, and corn, beans and peas into the solution, let them soak four hours, and planted immediately. Twenty-four hours after planting, I dug up some of the corn and peas, and found that their roots were from one to one and a half inches in length. In forty-eight hours the roots were three or four inches, and the spire one to one and a half inches in length. The precise day that they broke ground I now forget.

My cucumbers and melons came up quick and well, and for the first time in my life, my beets were up before any weeds were started. In a garden adjoining mine, planted nine or ten days previous to mine, beans were just breaking the ground when mine were planted, yet mine passed them in a week, my corn came up about the

same time, and my peas came up first. Now as to the *moisture* merely, seeds lying in the ground eight or ten days would imbibe as much as they would by soaking four hours. I have not marked the exact time of my seeds vegetating, since 1845. I know, however, that my seeds do not fail me as they used to do, and as my neighbor's very frequently do.

This year I did not plant my garden till the 17th of May. Every thing that I soaked came up quick, so that my plants were altogether ahead of the weeds, and my cucumbers and melons have kept out of the reach of the bugs, while my neighbors have planted two, three, and four times. I have never seen any notice of this solution, except as above mentioned. Two or three of my neighbors have tried the experiment this year with the like good results.

BAILEY.

Binghamton, 1847.

The Woodpecker.

In more than fifty orchards which I have myself carefully examined, those trees which were marked by the woodpecker, (for some trees they never touch, perhaps because not penetrated by insects) were uniformly the most thriving, and seemingly the most productive; many of these were upwards of sixty years old, their trunks completely covered with holes, while the branches were broad, luxuriant, and covered with fruit. Of decayed trees, more than three-fourths were untouched by the woodpecker. Several intelligent farmers, with whom I have conversed, candidly acknowledge the truth of these observations, and with justice look upon these birds as beneficial; but the most common opinion is, that they bore the trees to suck the sap, and so destroy its vegetation; though pine and other resinous trees, on the juices of which it is not pretended they feed, are often found equally perforated. Were the sap of the tree their object, the saccharine juices of the birch, the sugar maple, and several others, would be much more inviting, because more sweet and nourishing than that of either the pear or apple tree; but I have not observed one mark on the former, for ten thousand that may be seen on the latter. Besides, the early part of spring is the season when the sap flows most abundantly; whereas, it is only during the months of September, October, and November, that woodpeckers are seen so indefatigably engaged in orchards, probing every crack and crevice, boring through the bark, and, what is worth remarking, principally on the south and south west sides of the tree, for the eggs and larvæ deposited there by the countless swarms of summer insects. These, if suffered to remain, would prey upon the very vitals, if I may so express it, of the tree, and in the succeeding summer give birth to myriads more of their race, equally destructive.

Here, then, is a whole species, I may say genus of birds, which Providence seems to have form-

ed for the protection of our fruit and forest trees from the ravages of vermin, which every day destroy millions of those noxious insects that would otherwise blast the hopes of the husbandman, and which even promote the fertility of the trees; and, in return, are proscribed by those who ought to have been their protectors, and incitements and rewards held out for their destruction! Let us examine better into the operations of nature; very many of our mistaken opinions and groundless prejudices will be abandoned for more just, enlarged, and humane modes of thinking.—*Wilson's Ornithology.*

Influence of the Rhubarb Plant in producing Gravel.

The fourteenth number of Braithwaite's *Retrospect of Practical Medicine and Surgery*, contains an article on this subject which is calculated to alarm those who indulge in the pies and tarts made of this palatable plant. It seems that it furnishes the material of one of the most painful and dangerous diseases to which the human system is subject.

The substance of the article is briefly this: The young stalks of rhubarb contain oxalic acid, and hard water contains lime; and consequently those who eat articles of food made of the plant, and drink such water, are introducing into their system the constituent ingredients of the mulberry calculus, which is an oxalate of lime; and if they are dyspeptic, and unable to digest the acid, "are very likely indeed to incur the pain and the exceeding peril of a renal concretion of that kind." "The oxalate was found in three out of four after eating the rhubarb."

This, it must be admitted, is rather startling. The mulberry calculus is the most painful form of the concretion of the kidneys and bladder.—The rhubarb plant has come into extensive use, and is generally considered a very wholesome article of diet. If the danger of using it is as great as is represented in the *Retrospect*, it should be universally known. Indeed, there would seem to be reason to infer that the danger is not confined to those who use limestone water, for the acid will probably combine with other bases as well as with lime. The presence of oxalic acid in the plant, perceptible to the taste, would lead one to conclude, *a priori*, that the ascribed effect would result from its use, whenever it is not decomposed by the stomach, which seems to be the case in the greater proportion of instances; and the experiments leave little room to doubt its agency in the production of oxalate gravel in the urine.

J. G. C.

York, Pa., June, 1847.

Eye Water.—Mix 1 ounce of Rose Water, 1 ounce of Laudanum, and a few grains of White Vitriol.

Floriculture.

MR. EDITOR—In a climate like ours, where winter reigns four or five months, and nature is disrobed of her beautiful apparel for half the year, why is it that so few of our dwellings are ornamented with vases of flowers—so that while winter storms are raging around us, and the hail and sleet are rattling against our windows, the eye can be relieved from the sterility and cheerlessness without, by constant verdure and beauty within? Who can minutely examine a delicate flower, and not admire its wonderful mechanism? The cultivation of flowers, whether in the garden or the green-house, is a source of almost endless enjoyment. Ask the enthusiastic lover of flowers, who, with her own hands, cultivates them, if she is not compensated for all her labors. She watches over and nurtures her plants as a gentle nurse doth her offspring. She discovers new beauty in every bud, and expatiates with delight upon each expanding flower. While arranging her vases, or weeding her border, she gaily sings—

I'll give thee, my flowers,
A portion of my hours,
And my hands I'll employ,
With gratitude and joy,
To rear thee;—while I live,
Ye'll unceasingly give

Vigor to my frame, happiness to my heart,
The hue of the rose to my cheek ye'll impart.

This is a checkered scene. It has its lights and shadows—its joys and its sorrows—and whatever enables us to increase our own happiness, or the happiness of those around us, should receive a due share of our attention. Human enjoyment is made up of little things. The cultivation of flowers has a tendency to soften the heart, to calm tumultuous feelings, and relieve us from the dull, monotonous, every-day cares of life. Let a person whose passions are highly excited be introduced into a well stored green-house, and its varied beauties pointed out to him, the tumult within will be calmed, and his countenance soon indicate smiles instead of frowns. I rejoice to find as I travel through the country, that there is an increasing interest taken in the cultivation of flowers in and about the house. When I see a dwelling, (I care not whether constructed of marble or of logs,) the windows of which are filled with vases of flowers, I think the hearts of the inmates of that house are made better by them. I often wonder why, in our villages, and in the country too, so few of the dwellings are ornamented with that beautiful appendage, the "Green House." *Home* should be made attractive. We should not spare reasonable time and expense to ornament our dwellings and grounds, so that our children may not spend their pastime and seek their enjoyment abroad, but find them in and around the paternal habitation.

My principal object in writing this article is to induce the fair readers of the "Farmer" to petition their husbands and fathers, to attach to their dwellings a green-house. Methinks I hear a large

majority of my brother farmers, whose thoughts seem to be absorbed with fine wheat fields, luxuriant corn, handsome cattle, fat pigs, &c., exclaim, "What! expend twenty, fifty, or a hundred dollars to build a green-house, in which to raise flowers, that will not be worth any thing when they are grown?" But, my dear sirs, you forget that what contributes to the happiness of your family, friends and neighbors—what pleases your wife and daughters, and affords them a delightful place for amusement and recreation, after going through with the dull routine of the kitchen, and the every day occurrences of household affairs, *is or ought to be worth something.*

A family green-house should be attached to the south side of the room mostly occupied in winter, and if of small dimensions, say seven by fourteen feet, or even ten by twenty, can be warmed without any extra apparatus for heating, simply by an open door, or windows leading from the room to the green-house. If warmed in this way, the house should be made very tight, and without an outside door, as the frequent passing through the door would allow much heat to escape. I have a green-house arranged on the above plan, and during the past winter have made no fire in the arch during the day, and but on three or four occasions when the coldest nights occurred. When the sun shines, although the weather may be cold, my dining room, which is fifteen by eighteen feet, is often sufficiently warmed from the green-house alone.—*Ex. paper.*

E. R. PORTER.

Prattsburg, N. Y., April, 1847.

From the American Agriculturist.

Mode of keeping Milk to prevent Souring.

In passing a store a short time since in rather an obscure part of the city, and seeing a large number of milk-cans standing about the premises, I walked in and learned the following particulars from a fine healthy woman, of middle age, who, with her daughter, a buxom girl of about sixteen, was standing behind the counter waiting upon customers:—They sell the milk of 300 cows, principally consigned to them from Orange Co. by different farmers, which brings 3 cents a quart at wholesale, and 4 cents retail. Each can is marked with the initials of the farmer from whom the milk is received, in order to avoid confusion when they are exchanged for return.

In answer to some inquiries about sour milk, I was informed that there is a great difference in that brought by different individuals. Some of that which is brought the greatest distance keeps the longest; and in one instance they had never lost a single can. On asking the reason of this, I was told that the milkers must have filled the cans of cold milk with warm milk directly from the cows, which causes it to sour. "This," said the woman, "is always the effect of mixing the two." Another cause of souring, she said, "is

in consequence of not immediately depriving the milk of its animal heat. Some farmers set the cans of milk in cold water, and there leave them. The water soon becomes warm, and is but little better than if they were not put in at all. Others draw off the water as soon as it becomes warm, and replace it with cold, until the milk is sufficiently cooled; while others place the cans in a cold spring or vat of running water, where it soon becomes perfectly cold. But the best way," said she, "for I was brought up on a dairy farm, is to put the milk in large pans placed in running water, which will cause it to cool immediately; and then pour it into the cans, leaving off the lids or covers, for all gases to escape, until they are ready to convey to market."

By this time the husband came in, and I turned my attention to him, as his wife and daughter were busily engaged in waiting upon the customers. On asking him whether some lots of milk from the same cows do not make more butter at one time than another, he replied that he had churned through the hot weather with his own hands; that he had measured the milk and weighed the butter produced from it; and that he had found it would require from 11 to 20 quarts of milk, brought from the same farm, to make a pound of butter, but could give no satisfactory reason why it was so.

A TRAVELLER.

New York, June 1, 1847.

Preparations of sandy and light soils for Wheat.

R. P. Johnson, Esq., Sec., &c.:—As these are truly the days of improvement in the various sciences, it is somewhat surprising that agriculture should be so far in the back ground. There are some encouraging appearances, and inquiry begins to pervade the public mind, to see if there cannot be some improvement in this all important branch of public industry also. I would therefore offer my mite to my brother farmers, on the preparation of fallows for wheat.

Some nine or ten years since, I adopted a new method of preparing fallows for wheat, which was *one ploughing*—and this I follow whether I plough in June, July, or August. I apply the cultivator as often as necessary, to prevent any vegetation from growing, and land is thus kept perfectly clean for the seed. Should the land be quite hard it makes no difference, but is all the better, if you can obtain sufficient loose soil to cover the seed.

When I first commenced this mode of farming my neighbors laughed at the idea of obtaining a crop in this way. In the course however, of two or three years, they became convinced, by observation, that I raised the best wheat, according to the quality of the soil, and I am happy to say, that very many in this region, have adopted the same plan, and I do not know of one who has had occasion to regret it, for in every

instance that has come to my knowledge, it has succeeded well. My land is what may be called coarse sand and gravel, sandy loam and some rather stiff sand. Whether the same practice would answer on a hard and clayey soil or not, I cannot tell.

I sow my wheat generally between the 10th and 25th of September. When the wheat is sown the cultivator is passed over the land but once, which covers the wheat better than two or three times with the harrow. By the above plan, about one-half the usual labor on fallows is saved, and a more bountiful crop may be anticipated, than from the former method of ploughing three times, and using the harrow two or three times. It is a well known fact, that a stiff, hard clay soil, provided the ground had been well prepared, will grow more wheat to the acre than can be grown on a sandy or loamy soil. Now the question is, why is this so? To me it is obvious, the wheat plant grows most luxuriant on a hard soil, and that is the reason that one ploughing on these sandy soils, is preferable to three, and that land thus prepared will produce more wheat to the acre. The one ploughing leaves the ground hard compared with three ploughings, which, in these soils, leave the land loose, open and spongy, unsuited to the plant. This has been tested often in this neighborhood within the last few years.

The practice which I have adopted, is confirmed by a statement given by Henry Colman, Esq. in his account of the culture of wheat in England. He says: "The soil preferred for wheat is a strong soil, with a large proportion of clay; but experience has of late years, contrary to early and strong prejudices, determined that even the light and loamy soils are capable of bearing heavy crops of wheat, provided they can be sufficiently consolidated. This is often done by driving sheep over the land after sowing, and by an implement called the *presser*."

"This implement passes over the land in the direction of the furrow, and it forms on the furrows two deep drills at a time, the two rollers being eight or nine inches apart, and the blade of the roller, if it may so be called, or the rim being thin at the edge, and growing wider above the edge; and forming as it revolves, two furrows, hardened by its weight, into which the grain drops as it is sown; and when it comes up, it appears as if it had been regularly sown in drills of eight or nine inches apart, according to the width of the revolving pressers from each other." "The steam-presser is in fact, an abstract of a drill roller, consisting of but two cylinders of cast iron, which following the plough in the furrows, press and roll down the newly turned-up earth."

"I believe the soil for wheat cannot be too deep; though, as I have already stated, it may be too loose at the top, and in such cases, requires shallow ploughing and treading, or pressing on

very light soils, in order^d that the roots may be firmly fixed in the soil, and the dirt not liable to be blown away from them."

I use a two horse cultivator for putting in all seeds such as wheat, rye, oats, barley, and best of all for peas. This covers about six feet at a time. I use a smaller one for corn, having given up entirely the use of the plough.

I have given above my views with regard to the proper management of sandy and light soils for wheat; and if it shall prove advantageous to the farmers of New York, I shall be satisfied.

Yours, respectfully,

ELIAS COST.

Oaks Corners, Ontario Co., March 1847.

Plants for Hedges.

MR. HURLBUT:—In the May No. of the Michigan Farmer I noticed Mr. Prince's reply to my piece on hedges, and as he did not confine himself to facts, I did think of not noticing it; but being urged on by some of my neighbors, and never liking to be accused of having a palpitation at the heart, I shall say a few words in my defence, and leave it to your candid readers to judge who is most correct.

He states that although other trees and shrubs are used in England for hedges, there are 20 rods of hawthorn to one of either of the others. I beg leave to tell you that it is only in new enclosures where commons and waste lands have been brought into cultivation, that hawthorn is so generally used; and around large towns and cities, or in the vicinity of the Hammersmith nursery. In all the old settled parts of the country, the other plants are what compose the hedge mostly—not alone, but mixed—and at the present time they use an equal quantity of beech in many parts, as I stated in my communication to you.

Mr. P. states he passed over several species enumerated by me on account of their inappropriateness to the climate; to which I say, I did not recommend them to be used here, because they could not be procured without a great expense. I only said they were used in England for that purpose. The plants I recommended to be used here are all natives of Michigan, some of which I can procure any time at an hour's notice. The buckthorn used for hedges in England is the *Rhamnus catharticus*, and is so called all over the botanic world for aught I know.—The Sweet Briar, which he condemns, grows here quite well, and appears to be quite hardy, and is much more suitable for a hedge than the upright Honeysuckle, (*Althea frutex*,) Syringa, Lilac, Snowball, or Dentzia recommended by him. The Pyracantha he recommends in the January No., and condemns in the one for May. He has got me with *Pyrus Japonica*, but we know all about it. At its first introduction to Europe, the Linnæan Society of London called it the Japanese pear, but after a better acquaint-

ance with the plant, they thought fit to call it the Japonise quince; but to this day, it is as often called *Pyrus* as *Cydonia Japonica*.

The Beech and Hornbeam will either grow quicker than the Hawthorn, as I have them all here. As to the *Euonymus* being called Strawberry tree, I doubt whether Mr. P. is able to refer me to any standard American work in which it is so called. I should not have named it at first, had not the mistake come from the Original Linnæan Botanic Garden and Nursery, as people look for correctness from such places. And as to the fitness of the Arbutus for hedges I said nothing: all I said was, that its name was Strawberry tree, so that the moon story I give back to himself.

Mr. P. states that I misapplied the term Spindle tree as a general title for the genus *Euonymus*, and that it is only applicable to one individual species. This I defy him to prove—it being the proper English generic name used by all botanic authors both American and English of any note; for we have the Japan, common, broad leaved, narrow leaved, shining leaved, Spindle trees, &c. &c. * * *. In his article in the January No. Mr. P. recommends embankments and ditches by way of economy; in the May No. he condemns the plan as being pernicious on account of the diminution of moisture—so that he can write just what he chooses, and thinks we will swallow it all without chewing.

Now, Mr. Hurlbut and brother farmers, I have this to say, that Mr. P's object and mine in writing are quite different, mine being to give those a hint that wish to go into the business of hedge making. * * *. If any of you wishing to make hedges follow the plans I have previously recommended, and use the wild plants I there named, I will vouch for the success; and if you do not perfectly understand it and will call on me, I will show you some pieces of hedges, and give you any other information in my power.

JAMES NASH.

Hanover, Jackson Co., Mich., July 26, '47.

[In an article of Mr. Nash published in our number for March last, he is made to say. "The best of all hedges for farming purposes as a guard against cattle is Buck and Hawthorn alternately." It should have read, "Beech and Hawthorn."—Ed.]

To preserve Grain.—A discovery of considerable importance has been announced with regard to preserving grain. To preserve rye, and secure it from insects and rats, nothing more is necessary than not to fan it after it is threshed, and to stow it in the granaries mixed with the chaff. In this state it has been kept more than three years, without experiencing the smallest alteration, and even without the necessity of being turned to preserve it from humidity and fermentation. The experiment has not yet been made with wheat and other kinds of grain, and they may probably be preserved in chaff with equal advantage.

Grafting Every Month in the Year.

The investigations and experiments of horticulture are continually bringing forward something new, in the practice of the culture of plants and shrubs and trees. It was formerly thought that early in the spring was the only time to engraft, and also that it could only be done on the tree or stock while growing in the ground. Now people find it just as well to take up young trees, put them in the cellar, with sand or earth over the roots, and either graft the stocks at their leisure hours, before the fire during some stormy day or winter evening, carefully placing them back until time to set them out in the spring—or they cut the roots into pieces, of three or four inches in length, and engraft them in the same manner, preserving also in the same way, and in spring find, by setting them out, that they will spring up and grow as well as any other tree.—It has also been found that trees may probably be engrafted successfully during every month in the year. Friend Cole, of the Boston Cultivator, in describing Mr. Torrey's garden in Quincy, which he visited a week or two ago, says Mr. T. has grafted peach trees every month in the year excepting the winter months. Now if any one is disposed to try the experiment during the cold of winter, there can be no doubt that he would succeed. Why not as well as those stocks that are grafted in the house during the winter when the circulating system is torpid? It would be necessary only to protect the junction of the graft and stock carefully from the effect of snow and water, and the severe winds that we sometimes have in that inclement season of the year. We do not suppose that it would be advisable to do this work out of doors in the winter, but we mention it merely to illustrate the fact that we may engraft every month in the year with success.—*Maine Farmer.*

PRINCE'S LINNEAN BOTANIC GARDEN AND NURSERY, }
August 15th, 1847.

H. Hurlbut, Esq., Editor Michigan Farmer, Detroit, Mich.:

I have thought that a short communication on a point interesting to all cultivators of trees, and indicating the best mode for their preservation during the winter, when recently transmitted to a severe climate, would be acceptable to your readers. From several considerations, a preference is given to the transmission of trees from the Atlantic nurseries, in this vicinity, to the remote Western States, during the autumn; and as it often happens that they arrive at their destination after the ground has become frozen, a few simple suggestions may be deemed appropriate. On the arrival of trees after the ground is frozen, the best course is to bury them horizontally in a dry cellar, by making a hole 2 to 3 feet deep, and placing the trees therein with layers of sandy loam or other light soil, between each layer of trees. The earth should be made fine, so as to fill in compactly. They may thus be well preserved till spring, and if the frost has affected

the trees in any way, it will be abstracted.—Another course is, to dig a trench in the cellar sufficiently large to contain the roots, and to heel the trees therein (as it is termed,) covering the roots well with firm earth, so that it may penetrate among the fibres and leave no vacant spaces. Positive attention must be paid to the point that the cellar be a perfectly dry one, for if the earth becomes sodden during the winter, it will greatly injure, if not kill the roots.

When trees are received before the ground is frozen, but which are designed for spring planting, or are intended for spring sales, the following course will be found every way appropriate: Select a spot of ground that is perfectly dry, that is, one whose texture admits of a free filtration, and dig a space sufficiently large to the depth of 4 feet—place the trees therein horizontally, with layers of the same light mould or sand between them, filling in all compactly until within two feet of the surface, then fill up the balance entirely with earth. There will then be two feet of soil through which the frost will have to penetrate before it can reach the trees, which will be a sufficient protection in almost any case. In very severe latitudes, like Vermont, New Hampshire, Maine, and the British Provinces, the depth may be increased another foot; but if a partial degree of frost reaches the trees, it will not materially affect them. The trees thus secured, will when taken up in the spring, possess all the freshness of newly transplanted ones, and being on the spot at the very opening of spring, can be placed in their respective positions at the earliest period of removal, with every certainty of success.

W. R. PRINCE.

A Life Preserver for Thrashers.—Tear a piece off the finest sponge, enough to cover the mouth and nostrils, hollow it out so as to fit closely; tack a tape string around the outside, long enough to tie over the top of the head; soak the sponge in soft water and squeeze the water out with the hand, and when ready to commence work, tie it on tightly and evenly, so as to cover the mouth and nostrils completely. You can breathe and talk through the sponge almost as freely as without it—(though it will trouble those who use the "filthy weed,") and you can thrash where the dust from the machine rises like a dense fog around the head, and the lungs will be as free from harm as if you were hoeing corn. I have thrashed with a machine for the past four years, and always suffered much from the dust inhaled into the lungs, until last year, when I tried the sponge; and I can truly say it has been a life preserver to me.—*Ohio Cultivator.*

Burdock leaves will cure a horse of the slavers in five minutes; let him eat two leaves.—I have tried it many times. My horse will always use them when the slavers are bad.—Ploughman.

Bound Volumes for Premiums.

The Publishers of the Farmer now offer, for a remittance of one dollar, in addition to two copies of the present Volume, a copy of Volume Four, *substantially bound* in pamphlet form. It may be forwarded by mail at an expense of a few cents for postage.

White Weed, or Ox-Eye Daisy.

A subscriber wishes to know whether we have an improved method of killing this weed; and what he shall do with land infested with it?

We find no difficulty where the plough can run without interruption. In rocky grounds it is quite troublesome, and occupies space without yielding any harvest of value. In Cambridge large fields are covered with this weed—fields that are as easily ploughed as any lands in the State. They are owned by wealthy proprietors, who lease them from year to year for what they can obtain in cash, and make no provisions for improvements.

This white weed matures its seeds quite early, say in June, before the grass that grows with it is fit for the scythe, and hence more of its seeds are scattered over the field than its fair proportion. It has also another advantage, its seeds are more abundant than the seeds of most plants, and of course they have a more numerous progeny.

Lands abounding in white weed should be ploughed in June, before the seeds are mature enough for vegetation; and every spire should be buried under the furrow. This may be done, in plain fields, by tying bushes to the plough beam that will sweep down the standing blades before the mould plate, and prepare them for burial.

Some other seeds should then be sown to occupy the soil—seeds that will so vegetate as to cover the ground completely. If the land is in good heart, grass seeds may be sown thick; but white weed grounds are usually poor, and buck-wheat would be a good article to cover the soil and stifle any weeds that might start up.

In rough and rocky soils the plough should be used till the ground is thoroughly pulverized; then manure should be used to introduce the good grasses. Or a better mode still may be adopted in case the ground is suited for planting. Make it rich, till well for one year, and then lay to grass, sowing the seed thick. Herdsgrass and redtop are better than clover for this purpose.

When the ground is highly manured it may be seeded with herds-grass and redtop at our favorite season for sowing grass seeds—in the last week in August or the fore part of September—and no fears need be entertained in regard to the seeds of the white weed, in case the sward is turned up at that time with a plough that runs deep.

Capt. Abel Moore, of Concord, showed us, 2

or 3 years ago, a field of excellent grass that he had seeded down in August on turning a green sward furrow. He told us that this ground was covered with white weed at the time of turning the sward, and that he had not seen a stem of it since ploughing. His good grasses occupied the whole ground, for he put on manure enough to induce the seeds to grow.—*Ploughman.*

Albumen—a Cure for Dysentery.—The following is a translation of a recipe for the cure of this complaint, which was published by the physicians of Spain, in the Gazette of Madrid, during 1840:

"Prepare a draught of Albumen, by taking the whites of forty eggs or more, and, after whipping them well, sweeten the same, if necessary, with a small portion of the best double refined sugar. Let the patient drink large quantities of this repeatedly, insomuch as to fill his stomach, administering clysters of the same as often as possible. The patient must maintain a total abstinence from diet of any kind. In a few hours after, the pains will abate, and in twenty-four hours the disease will disappear; if it do not, it will be sure to disappear in forty-eight hours, provided the patient repeat the draughts as usual."

The addition of a few drops of orange flower water is highly beneficial.

Blackberry Syrup.—The following is the recipe for making the famous Blackberry Syrup. No family should be without it; all who try it will find it a sovereign remedy for bowel complaints: "To two quarts of blackberry juice, add half an ounce each of powdered nutmeg, cinnamon and allspice, and a quarter of an ounce of powdered cloves. Boil these together to get the strength of the spices, and to preserve the berry juice. While hot, add a pint of fourth proof French Brandy, and sweeten with loaf sugar. Give a child two teaspoonfuls three times a day, and if the disorder is not checked, add to the quantity."

Facts in Wheat Culture.—The past season has been marked by some important developments in the culture of wheat.

Mr. Noble, of Delaware, has tried the relative advantages of planting wheat in drills, nine inches apart, and sowing it broadcast in the usual way. The soil and treatment in other respects were precisely alike. The result was 34 bushels on the sown land, and 42 on the drilled. These experiments were made on fields of some acres.

Medicine for Hogs.—The American Farmer furnishes the following: When your hogs get sick, you know not of what, give them ears of corn, first dipped in tar and then rolled in sulphur. It is ten to one that it arrests the disease and restores the pig to perfect health.

Preserving Corn Meal.

Many farmers are aware that corn meal, in considerable bulk, will heat and become injured in warm weather, and to prevent this injury, some put a stone in the middle of a cask, box, or chest of meal. We have tried this mode with success. The following on this subject is from the doings of the New York Farmers' Club. And we would here remark, that the public are indebted to this society for much valuable information on agriculture, horticulture, and their kindred branches. *Boston Cultivator.*

The following communication from M. R. Hall was read :

GENTLEMEN :—For twenty-five years I have been engaged in ship store business, and formerly found much difficulty in furnishing corn meal that would keep sweet on long voyages and in warm climates.

On my reporting the difficulty of keeping corn to Zenas Coffin, Esq., one of the oldest whitemen at Nantucket, he informed me that there was no difficulty in keeping corn meal sweet for a three years' voyage, by putting a beach stone, the size of a large paving stone, in the centre of a hogshhead of meal, and hooped tight, and for a barrel, a stone four or five inches in diameter, and made tight. From the above information I made experiments to Rio Grande, and other Southern ports, by sending meal with the stone, and without the stone, and on the return of the ship I found the meal with the stone in the centre of the cask kept sweet, while the meal without the stone all spoilt—*sour*. The cask should be water-tight.

R. HALL.

New York, April 5, 1847.

N. B. Corn meal in tight rum puncheons, to the West Indies, will keep sweet, when in the common flour barrel it will all spoil. R. H.

After the adjournment the following note was received from Mr. John R. Burrows :

"Having heard a statement made at the meeting of the farmers' Club, to the effect that Indian meal may be preserved for two or three years, by putting a stone in the middle of a cask containing the meal, I state, in confirmation of the fact, that I have frequently understood from my father that rye might be preserved for a great length of time, free from must, by the same process, and that he had frequently tried the same experiment."

Raised Foot Paths.—Paths through the yard, near dwellings in the country, may be rendered much more convenient, and be much more easily kept in order, by raising an embankment from one to two feet in height. Two years ago, we dug a well, and had a quantity of the broken slate arranged for this purpose. It proved to be a labor-saving operation. Even when deep snows fall, very little (comparatively) settles on this ridge; and it is but a small job to keep the path open, while all the rest of the year, it may

be safely traversed with slippers or thin shoes without wetting our feet, as the rain soaks away from the surface almost as soon as it falls. It is never slippery like plank or boards.—*Alb. Cult.*

Camomile Destructive to Insects.—It is asserted in an article in the "Irish Gardener's Magazine," that a decoction of the leaves of this plant will effectually destroy insects; and that it likewise is much to the health of garden vegetables when growing in their vicinity. "No greenhouse or hot-house," observes the writer, "should ever be without camomile, in a green or dried state. Either the stalks or leaves will answer." It is a singular fact known only to a few, we believe, that when a plant is observed to be failing, without, perhaps, any obvious cause being apparent, it may be suddenly resuscitated, and brought again to its former vigor, simply by placing camomile near it.—*Maine Farmer.*

Children's Boots and Shoes.—The attention of every mother should be given to the state of her children's feet. How much subsequent pain, distortion and lameness, might be spared, if a little consideration were given in time to the child's shoes and boots. As a general rule, if proper length and width be given, all will be well; but this must be seen to frequently, as little feet will soon grow larger.

If shoes are worn, they should be easy across the toes, and of good form in the sole, hollowed and arched at the waist, and snug at the heel—if boots, then the elastic the same as ladies'.

If the ankles are weak, a surgeon should be consulted without delay. I have benefited many children by making an elastic lace boot, which, from the support it affords, compressing the muscles of the foot, and by bearing well up by means of a spring under the arch of the foot, has prevented lameness, and restored the feet and ankles to their natural form.—*Hall's Book of the Feet.*

Can Horses scent water in the ground?—It has been observed by travellers who have driven cattle on the "pampas" or plains of South America, that they could scent water for a considerable distance, and also would indicate the coming of rain, by their snuffing in the air, some time before it fell, as if they smelt it coming in the distance.

It is also said by those who have traveled on the deserts of Africa on camels, that this animal could scent water a great distance.

A friend was relating to us, the other day, as fact, that horses had a similar faculty. He states that if a horse be shut up in a pasture where there is no water, he will, at certain times of the day, make it a practice to stand in those situations where water is nearest to the surface, and thus indicate the best place for digging for it.

Have any of our readers ever observed this trait in the horse?—*Maine Farmer.*

EDITOR'S NOTE BOOK.

Burr's Seedling Strawberries.—We commend to the notice of such of our readers as love a good strawberry and think it worth the pains of cultivation, the advertisement of Burr's seedlings on our last page. A committee of the Columbus Horticultural Society reported on them in terms of high commendation, declaring that in their opinion several are superior in all respects to any varieties in cultivation—at least for the climate and soil of that region. The committee name nine varieties, as particularly excellent, including the six here advertised.

Grand River Valley Agricultural Society.—A society under this name was formed by citizens of Kent County at the village of Grand Rapids, on the 10th of July last. A constitution was adopted, which besides providing for the election of the usual officers, directs the holding of an "annual fair for the exhibition of agricultural products, domestic animals, and all articles of manufacture in relation thereto." The initiation fee is one dollar, and each member is required to pay the same sum annually.

If the reputation of the farmers of that region does not belie them, there is enterprize and intelligence enough among them to sustain an Agricultural Society, and make it, (as such societies always are when entered into with spirit,) highly interesting and useful. Success to the effort.

N. Y. State Agricultural Fair for 1847.—The next Fair is to be held at the village of Saratoga, on the 14th, 15th and 16th of September next.

The Detroit Horticultural Society holds its next exhibition on the 24th inst.

The Horticulturist.—We shall be happy to forward subscriptions for any who wish to procure this truly beautiful and valuable work.—Terms, \$3 a year; Luther Tucker, Publisher, A. J. Downing, Editor.

The only exception we feel inclined to take to its contents, is to the style of rural edifices of which the editor is fond. However they may suit the means and tickle the fancy of the cit, who retires with his thousands to ruralize in the country, they are hardly adapted to the views of those who look upon convenience, economy, and simplicity as cardinal requisites in the plan of a dwelling.

Catalogues.—We acknowledge the receipt of the extensive Nursery catalogues of B. Hodge, of Buffalo, and of Winter & Co. Flushing, Long Island. Mr. Hodge presents an attractive array of choice fruits, flowers, and ornamental trees, and we believe the reputation of his establishment stands well in respect to accuracy, and fair dealing. Of the resources of the establishment of Messrs. Winter & Co., an evidence was afforded at a late exhibition of the L. I. Horticultural Society, at which an entire room 30 by 45 feet was filled by those gentlemen, with fruits, flowers, &c., which carried off twelve of the Society's premiums. The above catalogues can be seen at our office.

Mildew.—Fruit trees are frequently affected with mildew, which checks the growth of the young shoots, and not unfrequently destroys their vitality. This may be removed by saturating the leaves with clean lime water, and then dusting them over with flower of sulphur. Will not the same application, if early made, save the Gooseberry from the blighting influence of the mildew.

Law of Manures.—The Supreme Court of Vermont held, in a recent decision, that all manures belonged to the freehold, and passed with the farm at its sale, and that the previous occupant of the farm, who made the manure from his own materials, had no right to remove it. This is, we believe, says the Boston Cultivator, directly opposed to a decision of the Supreme Court of Massachusetts.

Cockroaches—How to Destroy them.—Put into a pint of boiling water, two tea-spoons full of cayenne pepper, one of pulverised orris seed, half a drachm of saltpetre, the same quantity of white lead, and a wine glass full of extract of hops, one six-penny loaf of stale bread reduced to a crumb; digest in a moderate heat for six hours, then strain it through a cloth, and add thirty drops of tincture of quassia, and let it stand till next day, then bottle it, when it is fit for use. Some dozen lumps of sugar saturated with this mixture and strewed about the kitchen, will remove this pest in less than no time.

Maple Sugar.—The product of maple sugar in 1846, in the United States, is estimated at 22,000,000 pounds. At six cents a pound, it will amount to \$1,320,000.

Burr's Ohio Seedling Strawberries.

THE following choice varieties of new Seedling Strawberries are now offered for sale, and confidently recommended to the public as superior to any heretofore cultivated.

1. *Ohio Mammoth*.—Fruit very large, the most uniformly large strawberry known; rather long or conical, pale red or flesh color—flavor sweet and excellent; foliage large, plants very hardy, vigorous and productive—flowers perfect or staminate.

2. *Burr's New Pine*.—Berries large, light or pale red, and possess a very high aromatic, sweet and delicious flavor; very early; plants perfectly hardy, vigorous and uncommonly productive; pistillate; unquestionably the very best strawberry cultivated.

3. *Rival Hudson*.—Fruit dark and shining red, resembling the Hudson of Cincinnati, except the stem and fruit are both longer; flavor high, rich, and excellent; plants perfectly hardy a profuse bearer; pistillate.

4. *Columbus*.—A beautiful large dark colored fruit nearly round, possessing a rich and sweet flavor, plants very hardy, and uncommonly prolific; pistillate.

5. *Scarlet Melting*.—A handsome dark colored fruit, rather long with a neck. Possessing a rich and pleasant flavor, flesh very tender, the plants are hardy; grow rapidly, and bear very abundantly; pistillate.

6. *Burr's Old Seedling*.—Undoubtedly the best known for impregnating other varieties, flowers staminate, blooming early and continuing late, and always producing (here) a large crop of large handsome and most delicious fruit.

Several additional varieties will be found described in a report on this subject, by a committee of the Columbus Horticultural Society, published in this paper; plants of which can be furnished to a limited number.

Prices of Plants.—Nos. 1 and 2, \$2.50 per dozen; Nos. 3, 4 and 5, \$1 per dozen; No. 6, 50 cents per dozen—\$2 per 100.

Plants of Hovey's Seedling, Hudson, (of Cincinnati) and several other old standard sorts can be supplied, if desired, at same price as No. 6.

Boxes of plants can be sent with speed and safety by express or stages in almost every direction from Columbus. No charge will be made for boxes or packing when \$5 worth or more plants are ordered.

JOHN BURR.

Columbus, July 15, 1847.

Buffalo Nursery and Horticultural Garden.

THIS establishment now contains the largest stock of Fruit Trees, Ornamental Trees, and Shrubbery of size, for sale, ever offered in Western New York, or in the Western country. The stock of fine thrifty Apple Trees is now unusually large and fine. The assortment of choice and select Cherry and Peach Trees, is also very large, embracing a large number of the most valuable and noted varieties. Among his selection of Pear Trees, are some 20 very fine sorts worked on the Quince. Also, a very general assortment of the Plum, Quince, Apricot, Nectarine, Gooseberry, Currant, Raspberry, Strawberry, &c.

The assortment of Ornamental Trees and Shrubs. Flowering Plants, &c., is now extensive, including the most rare and new varieties.

About 200 varieties of the Rose, among them, 30 varieties of the Moss Rose; 35 varieties of Hybrid Perpetual Roses, all hardy and profuse bloomers. 16 varieties of the Peonie.

The descriptive catalogue of this establishment for 1847—8, a pamphlet of 60 pages, giving a full description of several hundred varieties of fruits, &c., will be forwarded to all post-paid applicants.

Trees and Plants packed in superior order; and all orders by mail or otherwise, will receive the same attention as though the person were personally present.

B. HODGE.

Buffalo, Aug. 15, 1847.

ANCIENT AND REAL

Linnæan Botanic Garden and Nursery,

LATE of William Prince, deceased, Flushing, L. I., near New York. The new proprietors of this celebrated Nursery, known as Prince's, exclusively designated by the above title for nearly fifty years, offer for sale every description, including the newest and choicest varieties of Fruit and Ornamental Trees, Shrubs, Vines, Plants, Roses, &c., the genuineness of which may be depended upon; and they will unremittently endeavor to merit the confidence and patronage of the public, by integrity and liberality in dealing, and moderation in charges. Descriptive catalogues gratis on application post-paid.

WINTER & Co.

Aug. 1847. Proprietors.
William R. Prince & Co. have not, and never have had, any connection whatever with this ancient nursery, although they have applied its name to their new one.

FARM FOR SALE,

Consisting of 200 acres, situate in the town of Highland, Oakland Co. 14 miles from the White Lake Settlement. The land is oak openings, sufficiently timbered, the soil a sandy loam, with a sufficient mixture of clay to adapt it for wheat and grass. Roads run on the North and West sides. Ten acres have been under cultivation several years. The land belongs to a non-resident, and will be sold cheap, and on favorable terms of payment. Apply (post-paid) to the Editor of the Farmer, or (in person) to Samuel Burgess, who lives opposite the premises.
July 24th, 1847.

Detroit Nursery and Garden.

THE subscribers having established a Nursery at Detroit, on the south side of the Chicago road, one mile from the City Hall, are now prepared to fill orders for Fruit and Ornamental Trees, and Shrubbery. We have on hand a choice collection of the most approved varieties of Apple, Pear, Plum, Cherry, Peach, Apricot, Nectarine and Quince Trees. Red and White Currants, Strawberries, Red and White Raspberries, Gooseberries, Grapes, &c. Horse-Chesnut, Mountain Ash, Snow-Ball, Lilac, Althea frutex, Roses, Peonies, and other ornamental trees, Shrubs and Herbaceous plants. We have a large lot of Dwarf Pears, consisting of about twenty of the most choice varieties of early and late Pears; they will come into bearing from one to two years after transplanting. All orders left at the Nursery, or at the store of John Palmer & Co., No. 108 Jefferson Avenue, or addressed to the subscribers at Detroit, will be punctually attended to.

HOLMES & HASTINGS.

Detroit, August 9th, 1847.

Market Intelligence.

DETROIT, Aug. 21, 1847.

The steamship Cambria arrived at Boston on the 18th with Liverpool dates to the 1st inst. She brings news of a serious decline in breadstuffs; western canal flour, which at last quotations was at 31 to 36c., is now 27 @ 27½ c. The decline was owing to the highly promising state of all kinds of crops, combined with the tightness of the money market. Wheat, oats and barley were universally healthy. The harvest had already begun in the southern counties. The potatoe was as yet affected to a limited extent. Famine and disease are represented as rapidly vanishing in Ireland.

The effect of the above intelligence on the market in this country, is, of course, to cause a depression. In Buffalo, flour which the day before was worth \$5, fell at first to \$4.75, then to \$4.50 and \$4.25. In this city, flour from wagons, which had been selling at \$4.50 @ \$4.62½, brought to-day only \$4.00.

GRAIN AND PROVISIONS.—Corn, 30 @ 35c. Oats, 22 @ 26c. Butter, retail, 11 @ 12½c. Cheese, 6 @ 7c. Potatoes, 37½c. Pork, bbl. \$8, 10, @ 14. Beef, bbl. \$7, 8 @ 10.

MISCELLANEOUS.—Wool, full blood merino, 25 @ 29c., half blood, 23 @ 24c. Common, 18 @ 21c. Wood, cord, \$1.50 @ \$2. Salt, \$1.37 @ 1.50. Whitefish, 88. Cod, lb. 5 @ 5½. Lime, water, bbl. \$1.75; Grand River, ton, \$9.

CONTENTS OF THIS NUMBER.

The Buffalo Wool Depot;.....	81
Aphis, or Plant Louse; Hop Culture;.....	82
N. Y. Farmer's Club;.....	83
Cause and Preventive of rust in wheat;.....	85
Economy of labor-saving utensils; Canada thistle;.....	86
A new cherry; Successful steep for seeds;.....	87
The wood-pecker; Influence of the rhubarb plant in producing gravel; Eye water;.....	88
Horticulture; To keep milk from souring;.....	89
Preparation of sandy and light soils for wheat;.....	90
Plants for hedges; To preserve grain;.....	91
Grafting every month in the year; Preservation of fruit trees through the winter; Life preserver for thrashers; Cure for slavers in horses;.....	92
White weed; Cure for dysentery; Blackberry syrup; Facts in wheat culture; Medicine for hogs;.....	93
Preserving corn meal; Raised foot paths; Camomile destructive to insects; Children's boots and shoes; Can horses scent water in the ground;.....	94
Editor's Note-Book;.....	95
Advertisements, &c.;.....	96

MICHIGAN FARMER.

VOLUME V.—NEW SERIES.

PUBLISHED BY WILLIAMS AND HURLBUT, DETROIT.

H. HURLBUT, EDITOR.

TERMS.—One copy for 50 cents—Five copies for \$2—Eight copies for \$3—and at this last rate for any larger number; payable in advance. Subscriptions commence with the volume. Letters containing remittances in current bank bills may be sent at the risk and expense of the publishers.

PREMIUMS.—Any person sending \$1, post paid, shall receive two copies of Volume V., and a copy of Volume II or IV, at his option.

A remittance of \$5 shall entitle the sender to twelve copies of Volume V, and one copy of Volume II and IV each; or thirteen copies of Volume V, and a copy of Volume IV. The premiums will be sent by mail unless otherwise ordered, and will be subject only to newspaper postage.

ADVERTISEMENTS.—suited to the character of this paper, will be inserted at the rate of 75 cents a folio for the first insertion and 50 cents for each continuance.